ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter Of	)	
	)	
Amendment of Part 87 to Permit the	)	
Use of 112-118 MHz for Differential Global	)	WT Docket No. 96-211
Positioning System (GPS) Correction Data	)	RM-8607, 8687
and the Use of Hand-Held Transmitters	)	
on Frequencies in the Aeronautical	)	
Enroute Service	)	
	)	
and	)	
	)	
Amendment of Part 17 Concerning	)	
Construction, Marking, and Lighting of	)	
Antenna Structures	)	

REPLY OF AERONAUTICAL RADIO, INC.

Aeronautical Radio, Inc. (ARINC) by its attorneys, hereby submits this Reply to the late-filed Comments of the Federal Aviation Administration (FAA) filed March 6, 1997.[1]

In response to a petition for rulemaking submitted by ARINC on behalf of the air transport industry, the Commission proposes to authorize hand-held portables and low-power land mobile stations to be licensed as part of aeronautical enroute ground stations.

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[1] ARINC requests that the FCC accept this Reply. The FCC, in its Notice of Proposed Rule Making requested comments by January 15, 1997, and replies by January 30, 1997. The FAA did not submit its comments until five weeks after the time for replies had passed. ARINC does not object to the FCC's acceptance of the FAA's comments but requests that the Commission also accept this brief Reply.

Use of these mobile units will be limited to aeronautical operational control communications among the mobile, the aeronautical ground station, and aircraft on the ground at an airport.

The need for this type service was created by new FAA regulations requiring direct pilot to ground crew communications during procedures, such as deicing.[2] The FAA requires Part 121 air carriers to have an approved deicing program which must include "Communications procedures."[3] FAA Advisory Circular 120-60 (May 19, 1994) requires direct communications between the ground crew and flight crew during deicing procedures and any on-ground holdover.[4] Part 135 carriers have similar requirements for deicing,[5] including the requirements that pilots be trained in communications procedures during deicing.[6] Air carriers also will use portable aeronautical enroute stations for the ground crew to communicate ramp control information to the pilot and to coordinate maintenance actions with the flight crew. These units are required to meet current FAA requirements and will be used only to promote the safety and efficiency of flight.

In addition, the stations will be licensed and under the supervisory control of ARINC as the licensee of the ground station, and ARINC's contract staffing agencies, the air carriers

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2 *See* 14 C.F.R. § 121.629. The FAA requires Part 121 air carriers to have an approved deicing program which must include "Communications procedures." *See id.* § 121.629(c)(2)(iii). FAA Advisory Circular 120-60 (May 19, 1994) requires direct communications between the ground crew and flight crew during deicing procedures and any on-ground holdover (AC 120-60 at 7-8).

3 *See id.* § 121.629(c)(2)(iii).

4 *See* AC 120-60 at 7-8, 14.

5 *See* 14 C.F.R. § 135.227(b)(3).

6 *See* 14 C.F.R. § 135.(b)(6)(iv)(D).

and other aircraft operators. ARINC and members of the air transport industry share the FAA's concern for avoiding interference to aviation safety services and will take all reasonable measures to mitigate interference and to control the use of these hand-held portables operating under aeronautical enroute licenses.

The FAA objects to the licensing of these portables to improve the safety of flight and to meet its own regulations. The FAA asserts in its comments–without any analysis or support–that "[t]he introduction of mobile units (non-aircraft) into the airport environment will greatly increase the risks of RFI."[7] The FAA bases this vague concern on the fact that the "units will be free to operate in and around the airport, bringing them close or closer to our own transmitter/receiver facilities."[8] Representatives of ARINC have met with representatives of the FAA Frequency Management to discuss this matter and believe that the issue has no substance.[9] The FAA has not been able to be more specific as to its objections to the use of these radios in non-government spectrum.

First, the FAA errs when it suggests that the proposed rule would "introduce" non-aircraft mobile units to the airport environment. These units are already there, albeit without specific licenses. The threat of interference from the several hundred hand-held portables operated in a licensed mode under the control of ARINC and its contract staffing agencies as proposed by the new rule is insignificant compared with the potential for interference, if

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7 FAA Comments at 2.

8 *Id.*

9 ARINC's petition for rulemaking had its genesis in the Aeronautical Frequency Committee, which is composed of representatives from the nation's major airlines as well as business aviation, helicopter operators, and general aviation. FAA Frequency Management participates in the AFC as a non-voting associate member. The FAA's objections were not raised during AFC consideration of the need for the use of portable radios in the aeronautical enroute service.

there is any, presented by the literally hundreds of thousands of hand-held portable units now operating on the aviation band 118-137 MHz with no individual license and no objection from the FAA. The FAA has not identified any significant increase in unintentional interference due to the hundreds of thousand units now in the field. The legitimate purpose for the existing "unlicensed" portables is for use in small aircraft that do not require a specific license to operate.[10] However, the FCC and the FAA have little direct control over the use of these units, particularly once they are removed from the aircraft. These existing units can be used anywhere on the airfield or elsewhere. By contrast, the units to be *licensed* as part of an aeronautical enroute station are identifiable, subject to the control of a responsible licensee, and will constitute a very small number of units compared with those currently in use. ARINC and its users have demonstrated that they are extremely responsive to operational and interference concerns of the FCC and FAA. The additional impact of the small number of licensed units, the need for which is a direct result of FAA requirements, will be minuscule.

Because the proposed aeronautical enroute mobile units will not operate on frequencies used by the FAA, the FAA has suggested that the units may cause intermodulation interference with FAA communication. However, any review of the nature of the operation demonstrates that the increase in the possibility of intermodulation products being created by these low power stations is virtually zero. The practical use of these stations is in the terminal area and associated taxiways where there is line of sight to the aircraft with which the unit is communicating. The power of these units is typically three watts or less, which is significantly less than the 25-watt transmitters typically operated in

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[10] *See* 47 C.F.R. § 87.18(b).

the aircraft, which also move about the airfield. If there is an intermodulation problem created by the movement of the mobiles on the airport, the movement of the aircraft would create a far greater potential for intermodulation products than the low-power mobiles. Again, the objection of the FAA cannot be sustained.

ARINC has revised its manual for radio operations specifically to cover the responsibilities of agencies staffing ARINC radio stations in the use of all stations including hand-held portables. ARINC has been authorizing the use of portables at temporary locations in conjunction with deicing operation for the past three years. No reports of interference from the FAA have been received by ARINC as a result of these operations.

Clearly, ARINC and the air transport industry have demonstrated that the public interest will be served by the controlled use of mobile units in conjunction with aeronautical enroute ground stations. These portable units are needed to meet FAA requirements. The conclusory and unsupported comments filed by FAA Spectrum Management cannot overcome this manifest public interest. Accordingly, ARINC, on behalf of the air transport industry, urges the Commission to adopt its proposed rules with the minor clarification suggested in ARINC's Comments.

ARINC and the air transport industry will continue to work with the FAA to mitigate and remedy any instances of interference to aeronautical mobile communications.

Respectfully submitted,

AERONAUTICAL RADIO, INC.

By _____

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April 8, 1997

CERTIFICATE OF SERVICE

I hereby certify that on this 8th day of April, 1997, I caused copies of the foregoing "REPLY OF AERONAUTICAL RADIO, INC.," to be mailed via first-class postage prepaid mail to the following:

Mr. Gerald J. Markey
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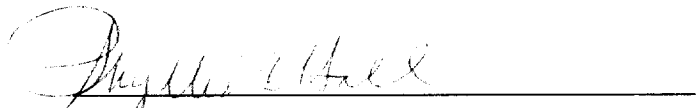

Phyllis C. Hall